



MANUFACTURING EXTENSION
PARTNERSHIP
NATIONAL ADVISORY BOARD
ANNUAL REPORT 1999

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NIST

National Institute of Standards and Technology
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BOARD MEMBERS

The Board consists of nine members with expertise in industrial extension who are appointed by the Director of NIST to serve three-year terms. The members bring a variety of manufacturing and manufacturing related backgrounds to the Board. Their experience and expertise includes in-depth representation of small and large manufacturing, labor, academia, economic development, consulting and state government. This mix will bring to MEP the outside advice critical to maintain and enhance the program's focus on the customer—America's smaller manufacturers.

JAY BRANDINGER
President and CEO
JA Brand Associates Inc.
Pennington, New Jersey



Dr. Brandinger has served on the Science and Technology Council of the States, a working group of science and technology advisors to governors sanctioned by the National Governors Association. As the state partner, he monitored the creation of the manufacturing extension center in New Jersey. With over forty-years in the electronics industry, Brandinger has recently started his own consulting company.

ROXIANNE DOWNING
CEO, Chairman of the Board
Qualis, Inc.
Des Moines, Iowa



Qualis, Inc. is a manufacturer of OTC topical pharmaceuticals, personal care and chemical specialty products. Ms. Downing, who is also co-founder of Qualis, Inc., sat on the Board of the Iowa Manufacturing Technology Center, the local MEP Center in Iowa; and serves on the Iowa Association of Business and Industry and the Youth Homes of Mid-America.

MARÍA ESTELA DE RÍOS
Vice-President of Corporate Affairs
Orion International
Technologies, Inc.
Albuquerque, New Mexico



Ms. de Rios has over 25 years of experience in general business and in government and commercial contracting. Currently she is executive vice president of Orion International Technologies, which is a research and development engineering company specializing in nuclear and environmental engineering services, advanced technologies, and data and control systems. She currently sits on the Governor's Business Advisory Council and the Board of Directors for the Industry Network Corporation, the local MEP Center in New Mexico.

IRWIN FELLER

Director, Institute for Policy
Research and Evaluation,
Professor of Economics,
The Pennsylvania State University



Dr. Feller, director, Institute for Policy and Research and Evaluation at the Pennsylvania State University, has extensive experience in policy research and evaluation. Dr. Feller's research has included the economic and political aspects of state technology development programs, the evaluation of these programs and the roles of universities in national and regional economic development. He has served as consultant to a number of organizations including the White House Office of Science and Technology Policy, the National Governors' Association, and the National Conference of State Legislatures. In 1996, Dr. Feller was appointed as an American Society of Mechanical Engineers (ASME) International, State Government Fellow in Pennsylvania.

MAURICE LEE, JR.

Chairman of the Board
Smokaroma, Inc.
Boley, Oklahoma



Smokaroma, Inc. is a small manufacturing firm producing a commercial cooker and fixtures for restaurants. In addition to his years of experience in manufacturing firms, Mr. Lee serves as a member of the Oklahoma District Export Council and is past Chair of the Board for the Oklahoma Alliance for Manufacturing Excellence, MEP's local Center in Oklahoma.

EDWARD NOHA

Chairman of the Board
CNA Financial Corporation
Chicago, Illinois



Prior to his current position, Mr. Noha served as chairman of the board and chief executive officer of the CNA Insurance Companies. Under his leadership, CNA rose to become one of the strongest and largest multi-line insurance organizations in the U.S. In 1992, Mr. Noha was appointed chairman of the Chicago Economic Development Commission by Mayor Richard M. Daley. In this role, he established the primary goal of job retention and expansion leading to over 20,000 jobs in the last three years. He also organized the proposal for the Chicago Manufacturing Center, one of the local MEP Centers in Illinois. He is currently the Chairman of the MEPNAB.

JAMES QUILLIN

Senior Advisor for Economic
Development, California
Conference of Machinists
Alamo, California



Mr. Quillin serves on the board of directors for Logic By Design, Inc., an on-line marketing and commerce firm. He has served as executive secretary and treasurer for the California Conference of Meachinists, was appointed by Govern Edmond G. Brown as commissioner of labor and served as president and representative of District Lodge 727—the International Association of Machinists and Aerospace Workers in California. He sat on the board of the California Manufacturing Technology Center, one of the local MEP Centers in California. Mr. Quillin resigned March 1999.

LAWRENCE RHOADES

President
Extrude Hone Corporation
Irwin, Pennsylvania



Extrude Hone Corporation is a leader in the field of non-traditional machining, finishing, and measurement. In 1989, Mr. Rhoades was named the first Small Business Exporter of the Year by the Commonwealth of Pennsylvania and currently serves as Chairman of the Board for the Southwestern Pennsylvania Industrial Resource Center, one of the MEP affiliates in Pennsylvania. In that capacity, he has testified before the House Science Committee on behalf of the MEP system.

WILLIAM WEBBER

Interim Director
PT CAM
Greensboro, North Carolina



In Mr. Webber's current role as a private business advisor and consultant, he serves as interim director of PT CAM a non-profit training firm specializing in shop-floor training using the most up-to-date metal working equipment. In addition to his background in large manufacturing facilities such as the Raymond Corporation, Allegheny International, Inc. and General Electric, Webber has an extensive background in strategic planning and operations. Mr. Webber resigned May 1999.

FOREWORD

1999 was the last year for five of the Manufacturing Extension Partnership National Advisory Board's original members: Jim Quillin, labor representative; Jay Brandinger, state representative; William Webber, small manufacturing consultant; Maurice Lee, Jr., small manufacturer; and Roxianne Downing, small manufacturer. As these five members transition off of the Board, we would like to take this opportunity to express gratitude for their outstanding dedication to America's smaller manufacturers and their selfless service to the Manufacturing Extension Partnership. They will be considered the pioneers of the MEPNAB and their mark will remain long after they have gone.

Last year also marked the first year after the congressional removal of the "Sunset" clause. This provision eliminated funding for Centers with over six years of service. With the removal of "Sunset," the MEP system as a whole can concentrate more on the future of the system and how to move Centers toward high performance. In turn Centers can transform the nation's 385,000 smaller manufacturers into high performance firms. In this vein the Board deliberated a number of issues from the vantage point of how will this improve the work the Centers carry out with their clients.

We continue to voice our commitment to the training needs of the MEP manufacturing specialists that are in the field working with the client firms. We have the responsibility to look at ways the system can provide services more efficiently and to determine a service mix that each Center no matter how large or how small can offer to the smaller firms in their region.

To meet the needs of the smaller manufacturers, the Board focused on a number of initiatives that would help firms grow to a new level of high performance. We feel we must again this year highlight the great work done by the Centers that partnered with NIST MEP to create the Y2K Conversion 2000: Assessment Tool and Training package. Through September 1999, a sampling of Centers in the MEP system reported over 2600 Y2K workshops attended by over 56,000 individuals representing over 27,000 companies. In addition, MEP Centers have distributed over 150,000 Y2K Jumpstart Kits as of December 1999. This alone has raised the awareness of the MEP program with smaller firms and has helped smaller firms recognize their businesses deficiencies and in depth needs in the area of eCommerce/eBusiness. The Y2K effort can be held up as a very successful example of the partnership between the National Institute of Standards and Technology's Manufacturing Extension Partnership and the local Centers.

A team of MEP Centers working with the NIST MEP producing a tool for national use by all MEP Centers in over 400 locations not only makes financial sense but it pulls from the very best the system has to offer to create the best tool or product possible. NIST MEP uses this model for the products and services offered to the entire system and the Board highly supports this model.

The Lean Manufacturing initiative, another example of a product created in collaboration among Centers from the system and NIST MEP, is an area the Board greatly supported last year that has really played a major role in filling a need for a service to all Centers. A total of 1,546 manufacturing specialists have been trained in all of the Lean courses, as of December 1999.

Of this 1,546, 106 manufacturing specialists have been trained to train others in Lean operations, specifically 8,000 company employees to date. The Board sees Lean continuing to be a strong service offered by the system throughout the coming year.

Another area of great interest to the Board is field staff training and the Board took a closer look at MEP's plans for MEP University, a virtual University with training courses for Center manufacturing specialists and field staff. These courses offered to help manufacturing field specialists become more efficient client managers, more efficient Center operations managers and continually improve and develop their technical expertise. The Board sees this as a very positive beginning and would like to look into whether the training courses could eventually be offered to a wider range of service providers for a fee.

During 1999, MEP had major impacts to report. It was reported that the MEP network of extension Centers has served over 84,000 smaller manufacturers since the program's inception in 1988. The top four industries served were industrial machinery (17%), fabricated metals (14%), rubber and plastics (8%), and electronics (8%). As reported, 27 percent of MEP clients have less than 20 employees.

The Government Performance and Results Act was established to improve the delivery of Federal Government programs and services, to measure and monitor the results of programs including program outcomes and service quality, and to enhance decision-making by program managers, congressional leaders, and others regarding services quality, program results and outcomes. The areas MEP measures under GPRA—increased sales, labor and material savings, capital investment and inventory savings—represent impacts that clients attribute directly to MEP services during the fiscal year 1998 survey period. MEP's goal for increased sales was \$329 million. Achieving slightly less than 100 percent of this goal, MEP increased sales by \$327 million. The target savings of \$33 million for labor and materials was met in fiscal year 1998. The goal for client capital investment attributed to MEP assistance was exceeded by \$44 million, reaching \$222 million in fiscal year 1998. The only GPRA measure that fell below the MEP goal was inventory savings. In fiscal year 1998, MEP targeted a \$44 million savings in inventory, actual savings was only \$24 million.¹ MEP believes this difference is due to a change in the composition of demand for different types of MEP services in fiscal year 1998. MEP plans to continue to track this impact indicator to determine if variance represents a significant and stable change in the impact pattern. This set of indicators broadly illustrates MEP's impact on its clients' competitiveness, but does not capture

the many additional ways in which MEP services can benefit its customers.

1999 also marked the first year the MEPNAB's Subcommittee on Center Reviews fulfilled the legislatively required report on the MEP Center review process. The first report, "The NIST Manufacturing Extension Partnership: A Network for Success", went to Congress in July 1999. This year's report covering the 1999 Center reviews will be submitted in spring 2000.

The Board would like to note its appreciation for the involvement and support of NIST management. Specifically Ray Kammer, Director and Karen Brown, Deputy Director have provided valuable input and direction at our meetings and we look forward to continuing that relationship. MEPNAB also worked this year to develop a closer link with the NIST Visiting Committee on Advanced Technology (VCAT) and most recently was successful in meeting with the VCAT and setting up some processes to formally link the two Boards. We see this as key to sharing more detailed information regarding the program level activities being carried out at MEP and look forward to making this link a success.

¹ These are partial national system statistics reflecting data from 62 Centers reporting activities through the end of 1998, and 35 Centers reporting Y2K activities from January 1999 through September 1999.

INTRODUCTION

THE ADVISORY BOARD CHARTER

The Manufacturing Extension Partnership National Advisory Board (MEPNAB) of the National Institute of Standards and Technology (NIST) was established by direction of the Secretary of Commerce in October 1996.

The Board provides advice on programs, plans and policies; assesses the soundness of MEP plans and policies; evaluates current performance against MEP program plans; and functions in an advisory capacity.

The Board consists of nine members with backgrounds in industrial extension. All are appointed by the Director of NIST to serve three-year terms.

The Board is required to hold three business meetings a year with MEP and NIST management where in-depth reports are given on the progress of the various projects being carried out in the program and the impact the program is having on America's over 385,000 smaller manufacturers. The Board is also kept up to date on the budget process as it works its way through Congress. This annual report covers the Board's meetings and activities in January 1999, May 1999, and September 1999.

Other meetings may be called during the year as deemed necessary by the Chairman or at least one-third of the members. MEP and NIST management are active participants in the business meetings. The Board has established a subcommittee, the Subcommittee on Center Reviews, to provide a report to Congress on a review of the MEP evaluation process.

The MEPNAB subcommittee convenes as necessary to complete their review on this report.

This year we supported and participated in one of the most exciting events in honor of smaller manufacturers—the 1999 Year of the Small Manufacturer Manufacturing Summit. This event, co-hosted by the NIST MEP, the National Association of Manufacturers, and the Modernization Forum, provided a forum for leaders from industry, government, and academia to explore the challenges and opportunities facing America's smaller manufacturers. This Summit also honored and highlighted the hard work and dedication of the smaller manufacturers throughout the U.S. through an exhibit, "GREATER THAN THE SUM OF ITS PARTS." Every state was represented in this exhibit showcasing the myriad of products produced by American smaller manufacturers from candies and cookies to satellite components and plastics, from salsa and pasta to pacemakers and solar panels. This exhibit, in a snapshot, focused on the innovative people in manufacturing and the high-caliber products they produce. The Summit featured four Breakout Sessions touching on eCommerce,

environmental, workforce and international trade issues. One of our Board members, Maria de Rios, was featured as a panelist for the International Trade session. Maria spoke from her experiences as a smaller manufacturer working in international markets. In addition, our Chairman, Mr. Noha, not only welcomed the attendees on behalf of the MEPNAB, but also was instrumental in providing the compilation of findings from all of the sessions to the Secretary of Commerce, William M. Daley, at the closing session of the Summit.

We see this Summit as a great step toward increasing the awareness of the needs of smaller manufacturers and the role MEP can take in meeting these needs.

The Board summarizes its findings each year in an annual report that is submitted to the Director of NIST and is transmitted to the Secretary of Commerce. The report covers the Board's discussion of issues that affect the MEP and its nationwide network of Centers.

MAJOR ISSUES COVERED IN 1999

Y2K OUTREACH

The Board has been very interested in and has asked to be updated periodically regarding the MEP Y2K Initiative. We heard that MEP was awarded \$21 million through the Emergency Supplemental Appropriations for Fiscal Year 1999 to be distributed to the manufacturing extension centers to help smaller manufacturers with their Y2K needs. This additional funding will be used to add field resources (\$16.5 million), aid in technical and maintenance support (\$3 million) and provide training for field staff deploying the services (\$1.5 million). The effects of the Y2K effort will extend beyond Year 2000. This funding was distributed with the legislative requirement that Centers match the funds from other non-federal sources.

The Board approved of training field staff in the Y2K area and heard that with the additional field staff, MEP created a critical mass of trained field staff that provided Y2K technical assistance to smaller manufacturers. The supplemental funding provided the resources to hire 150 additional field staff from federal funds and 225 from state/local government and private sector funding. MEP conducted action planning and assessment workshops from January to June 1999. Remediation workshops ran from April to December 1999. Through September 1999, a sampling of Centers in the MEP system conducted

over 2,600 Y2K workshops attended by over 56,000 individuals representing over 27,000 companies. These are partial national system statistics reflecting data from 62 Centers reporting activities through the end of 1998, and 35 Centers reporting Y2K activities from January 1999 through September 1999.

In addition, MEP centers have distributed over 150,000 Y2K Jumpstart Kits as of December 1999. From October 1999 until June 2000, MEP will provide rapid response technical support to smaller manufacturers that are experiencing some sort of Y2K failure. The project is expected to wind down and conclude in June 2000.

The Board learned that the objective of the Technical Maintenance and Support task of the project was to create technical support for the widest possible utilization by small businesses of the MEP Y2K tools and workshop materials. This included a MEP Y2K Help Center that provides technical support for the MEP Y2K Self-Help Tool, Y2K workshop material support, and is an asset to callers regarding Y2K compliance questions. The Y2K Help Center was up and running on February 22, 1999 and will conclude its operations on June 30, 2000. The third task of the project was to provide training to MEP field staff. In doing this, MEP developed a detailed Y2K awareness, assessment, and remediation workshop curricula, and provided training for MEP, Agriculture, SBA and other agency officials. The workshop series included

sessions on action planning, assessment, computer systems, embedded systems and contingency planning. The rapid response strategies seminar was also developed for MEP and other agency field staff.

The Board heard about two Y2K tools that MEP has developed to provide to smaller manufacturers. The first is an assessment tool and the second is a rapid response management tool. The assessment tool is used by smaller manufacturers themselves to guide them through the assessment process, step-by step. MEP Centers have access to the TAVA Technologies database, which is a working database product that specifies which embedded systems will be affected by Y2K.

The Board believed the funding for the Y2K project would go a long way toward helping Centers reach many additional smaller manufacturers. The Board was concerned that the short time period between funding allocation and Y2K would limit the number of smaller manufacturers that MEP field staff were able to reach. MEP stated that Congress was aware of the time constraints and has demonstrated that they believe MEP is the best delivery system and resource available to help as many smaller manufacturers as possible by 2000. We also requested that MEP draft a plan to deal with the problems related to Y2K that arise after January 1, 2000 and look at transitioning into eBusiness services.

SUBCOMMITTEE REVIEWS

The Conference Report (105-825) of the Emergency Supplemental Appropriations for Fiscal Year 1999, dated October 8, 1998, included a request by Congress that NIST provide an annual report to the Committee detailing the results of the NIST MEP evaluation process. To this end NIST was asked to form a review panel comprised of knowledgeable and experienced individuals, who are neither employed by the agency nor involved with any of the NIST MEP Centers, to evaluate the results of the NIST MEP Center reviews.

The MEPNAB spent a session at each meeting this year discussing the status of this report and the overview by the MEPNAB Subcommittee on Center Reviews.

In July 1999 the report, reviewed by the MEPNAB Subcommittee on Center Reviews, was transmitted to Congress. The Subcommittee found *“that MEP has from its establishment evidenced a systematic, well managed, and adequately supported commitment to review MEP Center activities as well as of aggregate programmatic impacts.”*

The Board believes that MEP’s evaluation program has encompassed both formative and summative evaluations, employed a diverse array of methodologies that permits triangulation of findings, and employed the expertise of both internal staff and third-party researchers and consultants. The result is an impressive evaluation program. MEP’s evaluation processes have had impacts.

Findings from Center reviews have systematically been used to improve the managerial and operational performance of Centers. MEP also has used its evaluation processes to foster strengthened capacities to conduct internal performance reviews by the Centers themselves, although improvements are still required in the quality and validity of performance data provided by Centers.

MEP’s evaluation procedures have had impacts. They have led to the renewal of Centers, to conditional renewals based on remedying the Center operational issues that were identified by external panels, and to the discontinuation of MEP funding of Centers.

The Board notes that although MEP has an evaluation process worthy of commendation, MEP should not rest on past accomplishments and should continue to move forward on continuous improvement efforts. With the removal of the “Sunset” provision of law that set a maximum number of years a manufacturing extension center

could receive federal funding, it is the Board’s position that MEP must look at requiring even more rigorous performance review criteria and procedures.

The Board strongly believes that MEP’s review criteria need to place increased emphasis on performance results, not only for Center renewal, but also to determine the level of funding allocated to each Center. One of the strengths of the MEP program is its decentralized structure with each Center being designed and operated to best fit the needs of smaller firms in its geographic region. While adhering to that principle, the MEPNAB believes that a more efficient allocation of NIST MEP’s funds is possible if it were based upon performance contracts with each Center that provided for attainment of specific performance objectives. These objectives should relate to the number and percentage of firms within a given Center’s area that are served by the Center, documented economic and fiscal impacts of Center services on these firms and measures of the Center’s fiscal stability.

In the Board's judgement, emphasis on results also requires NIST MEP to reconsider its current operationalization of the concept of "high performance Centers" and its reliance on an adaptation of the Malcolm Baldrige National Quality Award criteria as the basis for its evaluation criteria.

The MEPNAB believes that the emphasis on high performance Centers was and remains an appropriate evaluation technique, and that many Centers likely benefited from attention to its component elements, especially during their formative years.

However the Board believes that the criteria are disproportionately geared to internal organizational procedures—of the seven criteria currently contained in this format, only one explicitly relates to results. The Board believes that analytically and empirically the

link between the six process criteria and results is too loose for fulfillment of the process criteria to be a valid proxy for the result criteria.

The MEPNAB is also concerned about the burden placed on Centers to adhere to the high performance Center reporting format. These reporting requirements can divert Center resources into the NIST MEP evaluation process away from more productive service delivery activities, thereby detracting from the Center's capability to enhance the performance of smaller manufacturers—the objective of the NIST MEP program.

The Board recommends that NIST MEP rebalance its portfolio of evaluation framework, emphasizing high performance Centers and related Baldrige criteria in the formative years of a Center's operations, years one through three, and shifting over to results-oriented measures in subsequent years. In addition we believe, that by the sixth year of a Center's operations, results measures should be the primary determinant of continued NIST MEP funding of a Center's operations and of the annual level of NIST MEP's financial support of a Center.

MARKET INFORMATION SYSTEM

Market information is critical to the success of the MEP network of Centers. In fact, developing the Integrated Knowledge Network (IKN) within the MEP system will go a long way toward providing field staff with the latest industry trends, competitive analysis reports, performance reports, benchmarking data from similar companies, emerging technology trends, import/ export reports, and reports on key factors affecting demand and profit down to the four digit SIC codes. A large piece of the information held in the IKN will be derived from cutting edge market information.

Tom Walker, MEP's Associate Director for Strategic Development, provided an overview on the proposed MEP market information system. Walker explained that in order to be an even more customer-driven organization, MEP needs to collect, organize and analyze market data throughout the system. The data will guide MEP to develop products that meet the needs of customers and are also beneficial to other stakeholders. This system will utilize current information available from various sources that can be analyzed to create a database of customer information that will be readily accessible to MEP field staff.

We heard that if NIST MEP can access current information that is readily available the system will have the best market access possible. MEP is developing a plan to access the market information currently available from customers, the market place and the general business environment. Once this information is compiled, it will be distributed to Centers throughout the system encouraging them to conduct their own market analysis. This information would be posted on the MEP Integrated Knowledge Network so the data can be retrieved easily and updated daily.

NIST MEP will carry out this study at a national level because some of the information is not available at the local level. The key to collecting market information is the supplemental training, which will further develop Center skills in market analysis. NIST MEP stated that since MEP will be gathering information that is already available, the cost for the project will be very low, with the exception of integrating the information into the system.

The Board has concerns regarding the accuracy of such a system that relies on input by hand since if the data are entered into the system inaccurately, Centers could then be accessing and acting on inaccurate data.

Although we understand this project is proposed based on a need to retrieve some of the customer knowledge that determines what products and services need to be developed, we suggest that MEP might also find a need and support for this project through both state development agencies and labor organizations

We believe that in order for the study to have more impact, MEP should also predict what smaller manufacturing would be like in the future. Perhaps establishing a group that would advise MEP on the most current issues facing smaller manufacturers would fill this need.

The Board believes we need more information to determine the direction the marketing information system should take at this point and would like to revisit it at future meetings.

MEP UNIVERSITY

The Board has stated its interest in continuous training for Center field staff. To discuss what MEP is doing in this area we invited Ned Ellington, (former) Director, MEP Office of Manufacturing Systems and Technology, to brief us on the status of the MEP University. MEP University is a “virtual training organization” that consists of all of the current Center training that is available or in development throughout the MEP system. We understood this initiative was created after the completion of a thorough needs analysis of anecdotal information, Center reviews, Center reporting, discussions with Center directors, working groups and NIST MEP management. MEP benchmarked its current training against that of corporate universities, such as Motorola University, Anderson University: a government-lead university, the Patent and Trademark Office University and consulting organizations like KPMG, Booz Allen Hamilton, and Arthur Andersen. We heard that MEP found, within the MEP system, formal training investments varied widely in ad-hoc professional development, on-the-job training, mentoring, and delivery of services. We agree that there is a definite need for consistent, system-wide training that could be disseminated throughout the system via MEP University. MEP University would

increase the capabilities of the people in the MEP system by transferring knowledge and skills that increase firm competitiveness.

We understand that MEP University will establish a common language, mission and vision across the system; support holistic work with firms to transition them to high performance; integrate knowledge sharing and continue professional development. This will be disseminated through three basic “Colleges”: Client Development, Practice Areas, and Center Strategies. These “Colleges” have 100-level classes that are the general knowledge training, 200-level classes that introduce MEP products and the implementation, and 300-level classes that are based on product/service integration.

Within the Practice Areas College are five major areas of study including management systems, industrial marketing systems, manufacturing systems, information technology and people systems. The Client Development College includes basic consulting skills such as sales, proposal writing, assessments, project management, and resource selection. The College of Client Development consists of orientation, basic consulting, and account management. The only pre-requisite for a course is the completion of introductory level course. The university will have training classes for all Center staff including Center management.

In the spring of 1999, the three-day foundation course was tested in Beta version, bi-monthly at NIST. In the Client Development College, basic consulting and selling 101 and 201 will be introduced. eBusiness, industrial marketing, Lean manufacturing, and FastTrac will be introduced in the Practice Area College which will include collaborating with Centers to define and address additional needs as well as partnering with associations. The Center Strategies College will introduce center progress report preparation workshops.

The Board commended MEP for their development of MEP University, stating that there was a great need for this type of system-wide training. The Board encouraged MEP to look into the training opportunities that lead to professional certification as well as certification to deliver specific products/tools. The Board also encouraged MEP to continue to develop a computer-based registration process.

ATP–MEP TECHNOLOGY DIFFUSION COLLABORATION

In 1999 we also looked at ways to access technology developed in federal laboratories and programs. We were pleased to hear that MEP was working with the NIST Advanced Technology Program (ATP) on a project to help commercialize technology developed through the ATP projects. Bill Burwell, MEP Account Manager, reviewed the MEP–ATP Technology Diffusion Collaboration pilot project. This pilot began about 18 months ago with the intention of linking the two programs through technology diffusion to smaller manufacturing establishments. There are seven Centers that are participating in the pilot project which include, CONN/STEP, Delaware Valley Industrial Resource Center, Illinois Manufacturing Extension Center, Lake Erie MEP, Michigan Manufacturing Technology Center, Southwestern Pennsylvania Industrial Resource Center, and Western New York Technology Deployment Center.

The pilot was established to accomplish three tasks. The first task is to identify the critical steps, key success factors, and significant obstacles to effective diffusion of company

researched (versus government researched) advanced technologies to smaller manufacturers. The collaborative effort would work toward diffusing the technology developed through ATP-funded projects. This technology must have the potential to be used by smaller firms as a process, a product, or a service and the capital requirements for transferring this technology would be made affordable to smaller manufacturers.

The second task is to evaluate the utility of cross-functional teams from MEP Centers and technology developers in the technology diffusion process. For each selected technology the team will develop a diffusion strategy. This strategy includes looking at ways to access technology developed in laboratories and programs identifying the characteristics of and needs of target smaller manufacturers and working through the MEP system to help identify specific companies that would match the target population. The pilot participants will mediate the transfer of intellectual property rights and sponsor workshops designed to brief potential customers on the strategy. The pilot will not allow any direct marketing or sales support for ATP companies. The focus of this pilot will include alternate paths and approaches

to reach smaller manufacturing enterprises. As the diffusion plans are implemented, task three will evaluate the pilot and report the results of the pilot so that the lessons learned can be applied in the future.

The third phase of the project began in October 1999. ATP is conducting a preliminary technology screening to determine the viability of specific technologies in the project. If a technology is selected, the pilot team will initiate the start of the pilot.

The Board looks forward to hearing about the progress of the pilot and determining future action.

MEP SYSTEM IDENTITY

The Board has shown a strong interest in increasing the awareness of the MEP program. The System Identity Project is one opportunity that addresses such interest. The MEP System Identity Project grew, in part, out of the market analysis work conducted by MEP at the national level. Through various research with smaller manufacturers, MEP found that they had not established a strong brand or name recognition and were charged by Centers and this Board to improve the awareness of the MEP network nationwide.

This recommendation caused MEP to conduct further research to develop appropriate strategies to create and build a system identity for the MEP network to advance awareness and value for the organization, both nationally and at the local level. Furthermore, this infrastructure limits the growth of the MEP brand value and accessibility to the country's smaller manufacturers due to the inconsistent brand presentation and product/ service offerings, delivery and marketplace perception.

The Board approved of MEP beginning the System Identity Project with fact-finding interviews, surveys, and group discussions with NIST management, NIST MEP management, Center Directors, Center marketing managers, and program stakeholders

among others. Each group provided varying opinions on the current and future state of the MEP system identity.

After completing the research in June 1999, NIST MEP relayed to the Board that there are many stakeholders that influence the system brand, and the MEP brand is influenced by constituencies that have distinctly different agendas. The findings conclude that Centers want to keep their local identity in addition to a recognized national brand affiliation. Centers believe this would help them gain credibility with smaller firms and help them market the program to state stakeholders and Boards. Local brand identity would also advance equity previously established in their local markets and protect the multiple funding resources that also must be recognized.

An endorsement strategy would best meet the current needs of local Centers. This approach would communicate affiliation with MEP: the benefits, standards, and practices to both external and internal audiences. The national brand would be used to enhance marketing to smaller firms as well as provide credibility and stability to local Centers as they compete in their fragmented marketplace.

The Board believes the first stage in the national branding initiative is to create a standardized endorsement: "a NIST MEP network affiliate." The endorsement will be visible whenever

the local brand is expressed both internally and externally and be in use by June 2000. The Board agreed that the concept of Brand Identity is necessary for market awareness of the MEP program and was equally supportive about maintaining the flexibility of services at the local level. We believe that since MEP's success is based on locally driven services it must not lose this focus as it markets services nationally.

The Board feels that MEP should leverage the partnership by endorsing Centers with NIST MEP brand. Core competencies and practices, quality enforcement, connectivity, training and utilization of the integrated knowledge network along with the performance based budgeting system will also help leverage the brand's worth. The Board also stated that a core group of standardized services could be packaged with locally based services for each Center. In addition, MEP should act like a franchise that can nationally achieve many of their common goals.

The Board stated that in order to use the national brand, MEP should establish a rigid qualification system for Center performance. This qualification system will be discussed at a future meeting.

MEP INTEGRATION PILOT PROJECT

The Board heard a presentation regarding the MEP Integration Pilot Project from Kevin Carr, Director, Manufacturing Extension Partnership. The Integration Pilot was formed to motivate all Centers to become high performance so they can transform manufacturers to high performance firms. To lead the Centers to high performance, 13 of the most entrepreneurial Center directors were asked to be a part of the project and help develop the integration of the MEP system.

This group is charged to help develop the products and services for the MEP system as well as a plan for their dissemination. The Board believes that Center core products and standardized quality of service will increase MEP's national capacity to serve America's smaller manufacturers.

We heard the MEP Integration group is still in the early stages of development, and has recently released its plan for accomplishing the overall objective.

The Pilot is divided into two groups with respective task subgroups to discuss and debate questions pertaining to their individual topic areas. The "Product and Services" task group focused on how the MEP System

develops and shares products and services in a cost beneficial fashion across the system.

This task group, will not only determine the needs of the MEP System, but will also deliver a proposed approach that will move them towards implementation.

The second task group, "Knowledge Management", will research how the MEP system shares knowledge throughout the system in a cost-effective manner. This task group determines the need for integrated knowledge management in the NIST MEP system, and proposes an architecture, which will be implemented.

The third task group is the "Personal Business Advisor" team. This group looks at how the MEP System develops knowledgeable and skilled senior executives to support the management issues faced by smaller manufacturers, Presidents, and CEOs, throughout the network of Centers.

The second subset of the pilot, the Board learned, is the Policy Group. This group will respond to the issues identified by the Product and Services, Knowledge Management, and Personal Business Advisor teams. These are key issues, which if not adequately addressed, will become barriers to integration. This team will discuss administrative, project sales, and service delivery issues. These areas also

include working with companies outside of a specific geographic region, project pricing, and allocation of revenues for multi-Center projects.

The Board believes that these elements, once established, will represent a brand of quality which can then be used as a reward for high performance Centers. For example, those Centers that excel in meeting the standardized system requirements (core competencies and quality of service delivery) would be granted the use of the MEP brand and would therefore be included in all national system projects. The Board endorsed the overall Integration Pilot, and sees it as a clear path toward high performance Centers.

1999: THE YEAR OF THE SMALL MANUFACTURER

One of the most exciting initiatives the Board was involved in this year was the Year of the Small Manufacturer. This initiative aligns with our recommendations for 1999 where we charged MEP to increase the awareness of the program to smaller manufacturers.

The Year of the Small Manufacturer highlighted our nation's smaller manufacturers by: recognizing their importance to the U.S. economy and the modernization issues they face; motivating them to modernize their operations; and strengthening partnerships with organizations whose constituencies are smaller manufacturers, including the business community, economic development organizations, universities, community and technical colleges, and trade associations.

English Drews, Manager, MEP Communications and Marketing Group, provided a brief overview of the events occurring during the "Year." The Year began in February with a declaration by Secretary Daley that named 1999 as The Year of the Small Manufacturer. The National Governor's Association also recognized the Year when it passed a resolution of support at their February 23, 1999 Winter Meeting.

During the year, MEP Centers across the country hosted recognition events, which celebrated the contribution of America's smaller manufacturers to the national economy. The Board also learned that as many as 19 states received recognition for their smaller manufacturers through gubernatorial or state legislature declarations, proclamations or resolutions. Those states include: Alabama, Delaware, Florida, Hawaii, Illinois, Kansas, Kentucky, Louisiana, Maine, Montana, New Mexico, New Jersey, New York, Ohio, Oklahoma, Oregon, Pennsylvania, Rhode Island, and Vermont.

We strongly supported MEP, along with the National Association of Manufacturers and the Modernization Forum, sponsoring a culminating event in Washington, D.C., that included a celebration ceremony and a manufacturing summit. That event was held on September 22 – 23, 1999 at the Ronald Reagan Building and International Trade Center.

The National Manufacturing Summit also celebrated Smaller Manufacturing Week as proclaimed by President Clinton during the week of September 19 – 25, 1999. The highlight of the Summit was an exhibit that showcased over 200 products made by 163 smaller manufacturers from all 50 states, Washington, D.C. and Puerto Rico. The exhibit exemplified the quality, diversity and innovation

of America's smaller manufacturers. Our Board chair and many of our members were pleased to participate in the Summit including a congressional recognition breakfast for smaller manufacturers. Breakout sessions were held to discuss the issues facing smaller manufacturers in the 21st century. The breakout sessions covered Advancing Sustainable Manufacturing, eCommerce: Building the Digital Economy, International Trade: Market Growth and Economic Prosperity, and Investing in People. Each session was facilitated by a panel of experts with a wide range of perspectives from academia, industry, labor, government, and the private sector. Maria de Rios, MEPNAB Board member, presented at the International Trade session her perspective as a small firm in international markets. An action agenda was developed from each of the sessions and will be packaged with background material in proceedings to be released in April 2000. Each breakout session's facilitator presented a summary of each session that was compiled and delivered to the Secretary of Commerce, William M. Daley, in the afternoon plenary by MEPNAB chairman Ed Noha.

We were delighted to note that the Summit drew a crowd of approximately 420 attendees from academia, industry, government, labor, associations, and the private sector, including 119 smaller manufacturers from across the country. Three congressional members also participated. Congressman Ken Bensen was the keynote speaker for the manufacturers breakfast, Congressman Donald Manzullo spoke as a panel member for the International Trade breakout session and Congresswoman Sue Kelly was a panelist for the Advancing Sustainable Manufacturing session. We felt that this culminating event was a wonderful summation to an incredible year for smaller manufacturing.

We strongly supported a hearing before Congress this year and were pleased to see that following the National Manufacturing Summit, the House of Representatives, Committee on Science, Technology Subcommittee, Chairwoman Connie Morella held a hearing entitled "Small Manufacturing and the Challenges of the New Millennium."

This hearing reviewed the discussions and findings of the National Manufacturing Summit and the impact of the Manufacturing Extension Partnership on America's smaller manufacturers. Witnesses included: Raymond Kammer, Director, NIST; Jerry Jasinowski, President, National Association of Manufacturers; John Churchill, Quality Assurance Director, Wilcoxon Research; and Norm Braddock, President, Saginaw Remanufacturing. The Board feels that hearings like this are critical to raise the awareness of smaller manufacturing issues and believes that this effort should be continued in future years.

In addition to our participation in the Summit, many of us were able to participate in our local Center's events celebrating the Year of the Small Manufacturer. Through these events, we were able to showcase the importance of America's smaller manufacturers and their impact on both local and national economies. We were also able to witness their testimonials regarding the challenges they face in the daily business world as well as their concerns about the future.

These events were an excellent opportunity for smaller manufacturers to come together to be recognized for their importance as well as formulate solutions to future challenges. The Board was extremely pleased with the execution of these events and believes that it increased the awareness of America's smaller manufacturers tremendously.

MEPNAB 2000 TOPICS FOR FUTURE REVIEW

CENTER SERVICE MIX STANDARDIZATION

ACCOUNT MANAGERS AS CONSULTANTS TO CENTERS

eBUSINESS

MOVING TOWARD HIGH PERFORMANCE CENTERS

TRAINING AND EDUCATION OF FIELD STAFF

LINKS WITH THE NIST VCAT

MEP UNIVERSITY

NATIONAL AWARENESS OF THE MEP PROGRAM

INTERNATIONAL SERVICES

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PROCLAMATION**

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RESOLUTION OF SUPPORT**

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UNITED STATES SECRETARY OF COMMERCE
WILLIAM M. DALEY**



Small Manufacturing Week, 1999

By the President of the United States of America

A Proclamation

America's free enterprise system is continually energized by the skill, vision, and exceptional performance of our Nation's small manufacturers—those who employ fewer than 500 employees. Though small in size, these companies make enormous contributions to our economy and provide our society and the world with high-quality manufactured goods. More important, small manufacturers are a vital source of new jobs—almost 1 million between 1962 and 1996—and provide a livelihood for nearly 12 million Americans.

We live in an age dominated by information and technology, where the global marketplace grows ever more complex and interdependent. As large manufacturers expand their reliance on smaller firms for parts and services, the performance of small manufacturers becomes increasingly important to the competitiveness of America's manufacturing sector.

My Administration, working with the Congress and State governments, has strived to ensure that these small firms have access to the resources, technology, expertise, and training they need to realize their highest potential. By passing two consecutive balanced budgets and signing into law the Taxpayer Relief Act of 1997, we have helped to reduce interest rates, ease the tax burden on small firms, and encourage investment and growth. The Small Business Administration, through its vigorous lending and loan guaranty efforts, has improved access to capital so that small manufacturing firms and other small businesses can modernize, expand, and invest in worker training.

The Manufacturing Extension Partnership (MEP) of the Department of Commerce, which is celebrating its tenth anniversary this year, gives small manufacturers a solid foundation on which to build innovative ideas and products. With a network of more than 70 nonprofit centers, the MEP serves small manufacturers in all 50 States, the District of Columbia, and Puerto Rico, providing access to the newest technology, manufacturing processes, and business practices. The MEP's local centers offer personalized guidance to manufacturers on issues ranging from business to technology solutions. And because these centers are linked together through the Department of Commerce's National Institute of Standards and Technology, even the smallest manufacturing firms can enjoy instant access to the most advanced national resources.

Most important, we are continuing to invest in education and training to give America's working men and women the skills and knowledge they need to succeed in the jobs of the 21st century. The Workforce Investment Act of 1998, which I was pleased to sign into law last year, provides skill grants directly to workers so they can choose the kind of training they want and where they want to obtain it.

As we observe Small Manufacturing Week, let us pay tribute to America's more than 385,000 small manufacturing firms whose commitment to hard work and excellence has helped set our country on a steady course for continued growth and prosperity.

NOW, THEREFORE, I, WILLIAM J. CLINTON, President of the United States of America, by virtue of the authority vested in me by the Constitution and laws of the United States, do hereby proclaim September 19 through September 25, 1999, as Small Manufacturing Week, 1999. I invite all Americans to observe this week with appropriate ceremonies, activities, and programs that recognize the achievements of our Nation's small manufacturers.

IN WITNESS WHEREOF, I have hereunto set my hand this twenty-fifth day of August, in the year of our Lord nineteen hundred and ninety-nine, and of the Independence of the United States of America the two hundred and twenty-fourth.

William J. Clinton

**NATIONAL GOVERNORS' ASSOCIATION
RESOLUTION**

THE YEAR OF THE SMALL MANUFACTURER

SMALL MANUFACTURERS MAKE UP THE LIFEblood OF THE U.S. ECONOMY. THEY INCLUDE NEARLY 98 PERCENT OF ALL U.S. MANUFACTURERS AND EMPLOY ABOUT 12 MILLION AMERICANS AT HIGH-WAGE JOBS. YET, AS IMPORTANT TO THE ECONOMY AS SMALLER MANUFACTURERS ARE, THEIR ROLE IS STILL LARGELY UNKNOWN TO MOST OF THE GENERAL PUBLIC. DURING 1999, THE NATION'S GOVERNORS WANT TO RECOGNIZE THE HUNDREDS OF THOUSANDS OF OUR NATION'S SMALL MANUFACTURERS WHOSE VITALITY AND DEDICATION TO THE AMERICAN SPIRIT OF FREE ENTERPRISE HAVE DONE SO MUCH FOR THE PROSPERITY OF THIS COUNTRY'S ECONOMY.

NO SECTOR OF THE AMERICAN ECONOMY REPRESENTS THIS COUNTRY'S SPIRIT OF FREE ENTERPRISE THAN ITS 380,000 SMALL MANUFACTURERS. IN FACT, MANUFACTURERS WITH LESS THAN 500 EMPLOYEES MAKE UP 98 PERCENT OF ALL U.S. MANUFACTURERS AND EMPLOY ABOUT 12 MILLION PEOPLE, OR TWO-THIRDS OF ALL U.S. MANUFACTURING WORKERS. ON AVERAGE, EACH \$1 MILLION IN FINAL SALES IN MANUFACTURING IS ASSOCIATED WITH 13.6 JOBS IN MANUFACTURING AND 8.4 JOBS IN OTHER SECTORS, SUCH AS RAW MATERIALS AND SERVICES. THESE JOBS PRODUCE BOTH THE FINAL PRODUCT AND THE INTERMEDIATE PRODUCT AS SUPPLIERS TO LARGER MANUFACTURERS.

AS LARGE MANUFACTURERS INCREASE THEIR DEPENDENCE ON SUPPLIERS FOR PARTS AND SERVICES, THE PERFORMANCE AND CAPABILITIES OF SMALL MANUFACTURERS BECOME EVEN MORE CRITICAL TO THE COMPETITIVENESS OF THE ENTIRE MANUFACTURING SECTOR AND TO THE HEALTH OF THE U.S. ECONOMY.

RECOGNIZING THE EXTRAORDINARY CONTRIBUTIONS OF THE NATION'S SMALL MANUFACTURERS TO THE STRENGTH AND WELL BEING OF THIS GREAT COUNTRY, THE STATES CONTINUE TO WORK TOWARD IMPLEMENTING POLICIES AND PROGRAMS DESIGNED TO HELP THESE COMPANIES OVERCOME BARRIERS TO THEIR PRODUCTIVITY AND COMPETITIVENESS.

THE GOVERNORS DO HEREBY PROCLAIM SUPPORT FOR 1999 BEING THE YEAR OF THE SMALL MANUFACTURER.

Time limited (effective Winter Meeting 1999-Winter Meeting 2000)



THE SECRETARY OF COMMERCE
Washington, D.C. 20230

FEB - 8 1999

1999: Year of the Small Manufacturer

There is nothing small about small manufacturing. That is why I am pleased to declare 1999 as the Year of the Small Manufacturer.

Here are a few facts about U.S. small manufacturers: More than 380,000 U.S. manufacturing firms have fewer than 500 workers. These companies employ more than 12 million people — over 65 percent of this country's manufacturing workforce. Small manufacturers produce over half of all that is made by U.S. manufacturers. Small manufacturers account for over \$185 billion in payroll.

As a small manufacturer, you are critical to the competitiveness of the entire manufacturing sector and to the health of the U.S. economy. But you may not have the resources to know about and to implement new technology, the latest modern manufacturing processes, and current best business practices.

The Manufacturing Extension Partnership, a program of the Commerce Department's National Institute of Standards and Technology, can play a key role in helping you to overcome barriers to productivity and competitiveness. Each center is locally managed and works directly with small manufacturers to provide expertise and services tailored to your most critical needs, including Y2K risk assessment, process improvement, and worker training. They can be reached at 1-800-MEP-4MFG.

Throughout the Year of the Small Manufacturer, NIST MEP and its nationwide network of over 400 extension centers and field offices will be celebrating the achievements of small manufacturers.

I applaud your spirit of free enterprise and thank you for the extraordinary contributions you and thousands of other U.S. small manufacturers make each day to the strength and competitiveness of our great Nation.

William M. Daley